

AMENDMENTS TO THE CLAIMS:

Original patented claims 1-10 are not being amended or canceled. However, for the convenience of the Examiner, they are being re-presented herein.

LISTING OF CLAIMS:

1. A semiconductor element module, comprising:

a package having a base and opposing side surfaces;

a semiconductor element arranged within said package; and

a plurality of leads extending along said side surfaces of the package with an open end of each of said leads extending at least to a package attaching plane, wherein each of said leads is soldered to said substrate and electrically connected through said package to said semiconductor element and serving to connect said semiconductor element to an external circuit;

wherein said base is shaped to form an extended portion providing a level difference along the base portion between said package and the plurality of leads proximate said package attaching plane so that a space is formed between the leads and the package; and

wherein said level difference serves to avoid capillary flow of solder to prevent short-circuiting between the leads adjacent to each other.

2. A semiconductor device, comprising:

a semiconductor element module according to claim 1; and

a substrate having conductor patterns and through-holes for connecting the conductor patterns to each other, wherein each of said leads is soldered to the substrate through an operative one of said through-holes so that the bottom of said package abuts on a mounting plane of the substrate.

3. A semiconductor device, comprising a semiconductor element module including:

a substrate;

a package having a base and opposing side surfaces:

a semiconductor element arranged within said package; and

a plurality of leads extending along said side surfaces of the package with an open end of each of said leads extending at least to a package attaching plane, wherein each of said leads is soldered to said substrate and electrically connected through said package to said semiconductor element and serving to connect said semiconductor element to an external circuit;

wherein said base is shaped to form an extended portion providing a level difference along the base portion between said package and the plurality of leads proximate said package attaching plane so that a space is formed between the leads and the package; and

a substance having conductor patterns for lead connection on a mounting plane thereof wherein each of said leads is soldered to the substrate through holes in each of said conductor patterns so that the bottom of said package forms a prescribed space from the mounting plane to avoid capillary flow of solder.

4. A semiconductor element module, comprising:

a substrate;

a package having a base and opposing side surfaces;

a semiconductor element arranged within said package;

a plurality of leads extending along said side surfaces of the package with an open end of each of said leads extending at least to a package attaching plane, wherein each of said leads is soldered to said substrate and electrically connected through said package to said semiconductor element and serving to connect said semiconductor element to an external circuit; and

brazing material for connecting said package and each of said leads;

wherein said base is shaped to form an extended portion providing a level difference along the base portion between said package and the plurality of leads proximate said package attaching plane so that a space is formed between the leads and the package; and

wherein said level difference permits each of said leads to be shaped proximate said package to avoid capillary flow of solder and prevent short-circuiting between the leads adjacent to each other.

5. A semiconductor element module, comprising:

a substrate;

a package having a base and opposing side surfaces;

a semiconductor element arranged within said package; and

a plurality of leads extending along said side surfaces of the package with an open terminal of each of said leads extending at least to a package attaching plane, wherein each of said leads is soldered to said substrate and electrically connected through said package to said semiconductor element and serving to connect said semiconductor element to an external circuit;

wherein a shape of said leads provides a level difference along the base portion between said package and the plurality of leads proximate said package attaching plane, said shape being such that a space is formed between the leads and the package; and

wherein said level difference serves to avoid capillary flow of solder to prevent short-circuiting between the leads adjacent to each other.

6. A semiconductor device comprising a semiconductor element module according to claim 5 and a substrate having conductor patterns and through-holes for connecting the conductor patterns to each other wherein each of said leads is soldered to the substrate through each said through-holes so that said level difference of each of said leads abuts on a mounting plane of the substrate.

7. A semiconductor device comprising a semiconductor element module including:

a substrate;

a package having a base and opposing side surfaces;

a semiconductor element arranged within said package; and

a plurality of leads extending along said side surfaces of the package with an open terminal of each of said leads extending at least to a package attaching plane, wherein each of said lead, is soldered to said substrate and electrically connected through said package to said semiconductor element and serving to connect said semiconductor element to an external circuit;

wherein a shape of said leads provides a level difference along the base portion between said package and the plurality of leads proximate said package attaching plane, said shape being such that a space is formed between the leads and the package; and

a substrate having conductor patterns for lead connection on a mounting plane thereof wherein each of said leads is soldered to the substrate through holes in each of said conductor patterns so that the bottom of said package forms a prescribed space from the mounting plane; and

wherein said level difference serves to avoid capillary flow of solder to prevent short-circuiting between the leads adjacent to each other.

8. A semiconductor element module comprising:

a substrate;

a package having a base and opposing side surfaces;

a semiconductor element arranged within said package;

a plurality of leads extending along said side surfaces of the package with an open terminal of each of said leads extending at least to a package attaching plane, wherein each of said leads is soldered to said substrate and electrically connected through said package to said semiconductor element and serving to connect said semiconductor element to an external circuit;

brazing material for connecting said package and each of said leads;

wherein a shape of said leads provides a level difference along the base portion between said package and the plurality of leads proximate said package attaching plane, said shape being such that a space is formed between the leads and the package; and

wherein said level difference provides different mechanical strengths permitting each of said leads to be bent proximate said package to avoid capillary flow of solder and prevent short-circuiting between the leads adjacent to each other.

9. A semiconductor element module according to claim 1, wherein said semiconductor element is an optical element.

10. A semiconductor element module according to claim 5, wherein said semiconductor element is an optical element.

11. - 62. (Canceled)